

purposes of describing the rate nodes. In Fig. 2, a geographic routing decision is made at 201 and a rate node 202 placed in the path of one outcome to apply a specified rate to the corresponding path. In the example of Fig. 2, the area code of the ANI is tested to determine if the call is from area code 914. If the call is from 914, the call is routed to termination 2 and if it is not, it is routed to termination 1. Along the termination 1-route is a rate node 202 that applies a rate for non-residences. Such a rate node application could be used, for example, to charge out-of-state callers a higher fee for information about a state lottery.

21

Change(s) applied
to document,

/L.M/
5/29/2012

Please replace paragraph on page ~~20~~, lines 7-20 with the following amended paragraph:

The following describes the course of a call made according to the invention:

1. A caller dials a number, for example, a pay-for-information number 1-900-NXX-XXXX.
2. Originating LEC 120 recognizes the number as one for the toll company providing 900 service to sponsors. Originating LEC 120 then routes the call to OTS 130.
3. OTS 130 receives the called number and ANI from LEC 120, generates a query containing this information, and sends the query to NCP 140.
4. NCP 140 looks up the called telephone number to determine the corresponding routing plan to implement. The routing plan contains test nodes and/or rate nodes. NCP 140 implements the plan to generate instructions for the routing and rating of the call.

Please replace paragraph on page ²³~~22~~, line 22 through page ²⁴~~23~~, line 3, with the following amended paragraph:

Referring to Fig. 9, note that the modifications to the routing plans stored in NCP 140 are implemented by means a GUI running on support system computer 195. The support system 195 can be accessed by a sponsor through various means such as through touch-tone commands and voice prompting using a telephone 171. This allows even small sponsors to make customized call routing plans. Alternatively, the GUI can be accessed by means of a secure Internet

Change(s) applied to document,
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Please replace paragraph on page ¹⁵~~14~~, lines 7-16 with the following amended paragraph:

Also connected to TIS 150 is an interacter client (IG) 180 which is a service type of information provider or sponsor that is connected directly to TIS 150. Interacter client 180 is capable of retrieving specialized data from TTS 150. ~~[[and]]~~ Calling POT 110 may be a computer, cell phone, a private branch exchange (PBX), other customer premises or off-premises equipment, a personal computer connecting to the public network through the Internet, or some other telecommunications device. Called POT 170 is a pay-for-call service such as a 900 number service. The LECs may be 15 one or more end offices or tandem offices that establish local area connections.

¹⁷
Please replace paragraph on page ~~16~~, lines 10-13 with the following amended paragraph:

An announcement system 196 permits callers to be prompted for and respond to requests for further information such as to enter an account number, PIN, or credit card number, etc. Announcement system 196 generates synthetic voice-prompting without the need for an operator.

¹⁸ ¹⁹
Please replace paragraph on page ~~17~~, line 10 through page ~~18~~, line 2, with the following amended paragraph:

Referring to Figs. 2, 3 and 4, examples of portions of a call routing plan for purposes of describing features and examples of application of the invention is shown. In a related application entitled Method and Apparatus for Controlling Rating of Calls to Pay Services, the entirety of which is incorporated herein by reference, a device for affecting the rate to be applied to a call, in response to a change in routing (routing here can mean a purely symbolic logical device so that a call may have alternative routes but still connected to the same destination), is described. In each plan portion, a call is routed to either a first (Term 1 201a) or a second (Term 2 201b) termination. The terminations shown and discussed are arbitrary and identified for

condition satisfiable by the call-origin-data, receiving at the computer call-origin-data defining an origination route of a call to the at least one of the plurality of telecommunications switches and for transmitting a selected route back to the telecommunications switch, determining a selected route responsively to the condition and the call origin-data[[:]], and transmitting the selected route to the telecommunications switch.

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Change(s) applied to document,
/L.M./

Please replace paragraph on page ~~13~~, lines 12-13 with the following amended paragraph:

Fig. 8 shows a flow chart representing a method of allowing a sponsor to insert rate and/or test nodes into a routing plan[[:]]; and

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Please replace paragraph on page ~~13~~, line 18 through page ~~14~~, line 6, with the following amended paragraph:

Referring to Fig. 1, a toll-network system shown generally at 100 connects a calling party with a called service provider. A calling party initiates a call through a calling plain old telephone (POT) 110, and is connected through a local exchange carrier (LEC) 120, to an originating toll switch (OTS) 130, in the present embodiment, a Lucent Technologies' #4 Electronic Switching System (#4ESS). Alternatively, POT 111 is connected to OTS 130 with operator assistance via operator assist platform 112. Also shown connected to OTS 130 is a calling POT or computer (PC) or PBX or some other kind of calling station directly connected to OTS 130 without the need for access through [[a]] an originating LEG. OTS 130 is in communication with a database computer called a network control point (NGP) 140. OTS 130 is connected to a terminating toll switch TIS 150, in the present embodiment, also a #4ESS. TIS 150 routes the call from OTS 130 to a terminating LEG 160 5 which connects the call to a called POT 170 of an information provider or other pay-for-call service.

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11

Change(s) applied to document, amended paragraph:

/L.M./

5/29/2012

According to still another embodiment, the invention is a telecommunications toll switch system connecting callers with called service sponsors. A shared database computer connected to many toll switches has a database storing routing plans corresponding to the service sponsors. A billing recorder connected to the toll switch, records call-duration and data indicating rates to be applied to the call. The latter data are recorded on a billing record. The routing plans define specific routes to be implemented by the originating toll switch when a call is received by the originating switch. The specific route is one of the alternative routes. The alternative routes can end at the same destination. The alternative routes are modifiable by a support system computer connected to the database computer through a program running on it. As discussed above, the support system computer is addressable through various means. The alternative routes are defined by a conditional branch point from which stem alternate branches. The specific route corresponds to one of the alternate ~~branch~~ branches that is connected to an outcome of the test node that satisfies a condition of the test node. At least one of the alternate branches has an object, called a rate node, that forces the rate applicable to the call to be overridden when that alternate branch is connected to the outcome. Thus the billing recorder records an override rate on the billing record when the condition is satisfied. The branch point is a test node in which the condition is determined by a parameter indicating an origin of the call. The parameter is communicated to the database computer through a query from the originating toll switch to the shared database computer.

12

Please replace paragraph on page ~~11~~, lines 15-26 with the following amended paragraph:

According to still another embodiment, the invention is a method for controlling a computer for controlling a plurality of telecommunications switches, comprising: storing, on the computer, routes through which the call may be routed to a final termination, the selected route being one of the routes, the selected route being selected from among the routes responsively to a

computer has a routing plan stored in the database. The method is as follows: Modify the call routing plans by insertion or deletion of an element that causes a call to be routed to a first termination when an ANI record detected by an originating one of the toll switches is incomplete. Transmit ANI data relating to a call from the originating toll switch to the central database computer. Determine specific instructions for routing the call from the routing plan modified by the step of modifying and transmitting the specific instructions to the originating toll switch. Receive at the originating toll switch the specific instructions. Route the call from the originating toll switch to the first termination, when the ANI record detected by the originating toll switch is incomplete. In the last step, the routing is not conditional at the switch, the condition is satisfied by the origin data transmitted to the database computer.

9

Change(s) applied to document,
/L.M./
5/29/2012

Please replace paragraph on page 8, lines 3-17 with the following amended paragraph:

According to still another embodiment, the invention is a method for permitting control of call routing and billing by sponsors of pay-for-call services in a toll network system. According to this embodiment, the method modifies call routing plans stored on a central database computer connected to multiple toll switches. The modification is done by inserting or deleting test node elements. One type of test node elements causes the call to be routed to a first termination if an OSPS record, indicating that the call originated through an operator, is incomplete. The next step is transmitting the OSPS record from the originating toll switch to the central database computer. Next, specific instructions for routing the call are determined from the routing plan and transmitted to the originating toll switch, received at the originating one of the toll switches implemented by the toll switch. Thus, the call will be routed to the first termination when the OSPS record detected by the originating toll switch indicates that the call originated through an operator.

7

Change(s) applied to document,
/L.M./

Please replace paragraph on page ~~6~~⁷, lines 19-24 with the following amended paragraph:

1. data identifying a calling party number used by the caller to place the call,
2. data indicating that the call arrived at the originating switch through a human operator,
- and
3. data indicating that the call originated from a cellular telephone.

7

Please replace paragraph on page ~~6~~⁷, line 25 through page ~~7~~⁸, line 12, with the following amended paragraph:

According to still another embodiment, the invention is a telecommunications toll switch system connecting callers with called service sponsors. The system has a database computer, in communication with multiple toll switches. The database computer has a database storing routing plans defining alternative routes that connect the callers to a termination of one of the service sponsors. Each of the alternative routes is determined based on at least one parameter supplied in a query receivable by the database computer from the originating switch. The originating switch is programmed to generate the query responsively to a call received by the originating switch from one of the callers to [[the]] one of the service sponsors. The originating switch is programmed to implement a specific route determined based on the parameter after receiving data from the database computer responsive to the routing plan and the query. The parameter defines at least partly, an originating route by which the call arrived at the originating switch prior.

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Please replace paragraph on page ~~7~~⁸, line 13 through page ~~8~~⁹, line 2, with the following amended paragraph:

According to still another embodiment, the invention is a method for controlling call routing and billing by sponsors of pay-for-call services in a toll network system. The system has toll switches, a central database computer connected to the toll switches and the central database

Amendments To The Specification

3

Change(s) applied to document,
/L.M./

Please replace paragraph on page ~~2~~³, lines 8 through 14, with the following amended paragraph:

5/29/2012

The price charged for a call can be a fixed rate per call or a fixed rate per minute of connect time. Other combinations are possible, for example, there may be a grace period during which the caller can hang up without incurring any charge. The call may run one rate for the first N incremental time periods (e.g. minutes) and another rate for each increment of time thereafter. A single call for an expensive service, for example medical advice, might be a hundred dollars or more.

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Please replace paragraph on page ~~1~~³, line 26 through page ~~3~~⁴, line 14, with the following amended paragraph:

In the prior art, it is known to block calls where a bad credit card number (invalid number or bad credit history) is entered by a caller (US Patent No. 4,756,020 to Fodale). Also known is call-blocking where the ANI delivered by the local exchange carrier (LEC) is correlated with a bad credit history. Such capability is provided by Lucent Technologies' #4 Electronic Switching System (#4ESS) in communication with a database computer called a network control processor (NCP). This system also provides call-blocking in the event of a bad credit card number. A callblocking system described in a patent to Friedes (USP 5,311,572) prompts a caller for additional information if the ANI information is insufficient to verify the identity of the caller. Another calling system that is responsive to credit information about a customer is described in USP 5,023,904 to Kaplan. A special number for dial ordering is made available by the telecommunications provider. The system checks the subscription status of callers[[,]] that place orders by dialing-in product codes[[,]] by looking up the ANI. The patent does not describe sharing of credit information.